

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application and for the courtesies extended during the Examiner Interview of August 8, 2005.

Disposition of Claims

Claims 1-12 are pending in the present patent application. Claims 1, 5, and 9 are independent. The remaining claims depend directly from claims 1, 5, and 9.

Claim Amendments

Claims 1-3, 5-7, and 9-11 have been amended for clarification. No new matter has been introduced by way of these amendments as support for these amendments may be found, for example, in Figure 1 and paragraph [0018] of the Instant Specification.

Drawings

Applicant respectfully requests that the Examiner acknowledge whether the formal drawings filed on July 1, 2001 are acceptable.

Rejections under 35 U.S.C. §101

Claims 1-4 stand rejected under 35 U.S.C. §101 because the Examiner asserts the claims are directed to non-statutory subject matter. As recommended by the Examiner, the preamble of claim 1 has been amended to recite, in part, "computer implemented method." (See Office Action dated May 19, 2005 at page 2). Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. §103

Claims 1-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the white paper entitled “Solaris Resource Manager – Controlling System Resources Effectively” by Sun Microsystems, Inc. (hereinafter “Sun”). For the reasons set forth below, this rejection is respectfully traversed.

Independent claims 1, 5, and 9 have been amended to recite, in part, “wherein said allocating system resources comprises implementing fair-share scheduling independently within each of said plurality of processor sets.” Sun discloses allocating resources using shares and fair-share scheduling. However, Sun does not teach or suggest implementing fair-share scheduling independently on each processor set within a system. Instead, Sun disclosed assigning shares to applications running on a system with at least one processor. Sun further discloses allocating the processor(s) time/power to a specific application based on the shares held by the specific application and the total number of shares held by all active applications (fair-share scheduling). (*See* Sun at pages 5 and 6). However, this is not equivalent to partitioning the processors of the system into a plurality of processor sets and then implementing fair-share scheduling within a processor set independently of other processing sets as recited in the claims.

What is recited in the claims is sufficiently complex and distinct to neither be anticipated by Sun nor obvious from Sun. The distribution of system resources using the methods taught by Sun would not be equivalent to the distribution of system resources resulting from following what is recited in the claims, because Sun is silent regarding the grouping of processors into independent processor sets. For example, consider a system with

five (5) processors (p1, p2, p3, p4, p5) and three (3) application groups (g1, g2, g3) to be executed using the processors. Shares are assigned in the following manner: g1 is given 3 shares; g2 is given 1 share; and g3 is given 2 shares. Using the methods taught by Sun would result in g1 being given $3/(3+1+2) \times 100\% = 50\%$ of system resources; g2 being given $1/(3+1+2) \times 100\% = 16.7\%$ of system resources; and g3 being given $2/(3+1+2) \times 100\% = 33.3\%$ of system resources.

Now, consider grouping the processors into processor sets as recited in the claims. For example, let p1 and p2 form processor set s1 and let p3, p4, p5 form processor set s2. Assign application group g1 to processor set s1 and both application groups g2 and g3 to processor set s2. The resulting distribution of system resources using fair share scheduling independently within each processor set, as recited in the claims, results in g1 being given $3/3 \times 2/5 \times 100\% = 40\%$ of system resources; g2 being given $1/(1+2) \times 3/5 \times 100\% = 20\%$ of system resources; and g3 being given $2/(1+2) \times 3/5 \times 100\% = 40\%$ of system resources. (*See, e.g., Instant Specification at paragraphs [016], [017], [018] and Figure 1.*) Clearly, as seen in the above example, the resulting distribution of system resources is different than that achieved using the methods taught by Sun. Thus, Sun does not disclose all the limitations of amended independent claims 1, 5, and 9.

Sun, whether viewed separately or in combination, fails to teach or suggest all the limitations of amended independent claims 1, 5, and 9. Thus, claims 1, 5, and 9 are patentable over Sun. Claims 2-4, 6-8, and 10-12 depend directly on claims 1, 5, and 9 and are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. As discussed during the Examiner Interview of August 8, 2005, the Examiner is also encouraged to contact the undersigned or his associates regarding possible Examiner Amendments to the claims. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03226/554001).

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Respectfully submitted,

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